Reviewer's report

Title: Postprandial glucose-lowering effects of fermented red ginseng in subjects with impaired fasting glucose or type 2 diabetes: A randomized, double-blind, placebo-controlled clinical trial

Version: 4
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Reviewer: Vladimir Vuksan

Reviewer's report:

The manuscript by Mi-Ra Oh entitled “Postprandial glucose-lowering effects of fermented red ginseng in subjects with impaired fasting glucose or type 2 diabetes: A randomized, double-blind, placebo-controlled clinical trial” provides very interesting evidence on the possible therapeutic domains of ginseng derivatives. However, there are several important concerns that need to be addressed:

Major:

1) The responses to previous review were not provided. I could not find the ‘point-by-point’ responses in the revised manuscript. This would have been highly helpful in re-review.

2) The authors should clearly state what were their primary and secondary analysis?

3) What is the rationale for evaluating changes in lipids? Moreover, this was done in a normolipidemic population which could potentially form a subject bias.

4) Please provide further details on your study population. How many participants were diagnosed with type 2 diabetes? Was insulin therapy included. How many individuals were on prescription antihyperglycemic medication? Did they take the medication during the glucose challenge test?

5) What is a rationale for selected dosing given that this is the first human intervention.

6) The ginsenoside profile of FRG should be included, according to the Consort statement for reporting of herbal interventions.

Minor:

- Please ensure manuscript is proof-read for grammar inconsistencies.

- Were subjects with fasting plasma glucose >140mg/dL excluded?

- What was the basis of criteria used to calculate power?

- In the context of this pilot trial it would have been very informative to measure concentration of compound K in participants.

- What was the available carbohydrate load of the standard meal?

- Table 2 lists FRG abbreviation as “fasting plasma glucose”. Please ensure this
and similar errors are corrected.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

One of my research interests is in ginseng and its isolates in cardiovascular disease. I have previously received research grants for study of ginseng interventions in diabetes management and related cardiometabolic disturbances and am a PI of ongoing clinical trials using ginseng interventions.